Checklist of the subfamily Aphidiinae (Hymenoptera: Braconidae) from Bulgaria

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A checklist of the Aphidiinae (Hymenoptera: Braconidae) from Bulgaria is given; eight reared species are reported of being new to the fauna of Bulgaria.

Introduction

Eight species of the subfamily Aphidiinae (Hymenoptera: Braconidae) new to the fauna of Bulgaria reported here were reared recently by the author and Mr I. Vulkov (Sofia) from aphids on lucerne (alfalfa) or wheat. They are incorporated in an updated and annotated checklist of the Aphidiinae from Bulgaria, being part of a project on the fauna of Braconidae of Bulgaria (in collaboration with C. van Achterberg, Leiden). Voucher specimens of the species new to the Bulgarian fauna will be deposited in the Nationaal Natuurhistorisch Museum, Leiden (excluding *Aphidius microlophi* Pennachio & Tremblay).

Aphidiinae are exclusively solitary endoparasitoids of aphids. They are one of the main components of the natural system controlling the aphid populations (Stary, 1970). This makes them promising agents of biological control and several species are being used for biological control in greenhouses and are included in introduction programmes.

The Bulgarian fauna of Aphidiinae has not been profoundly studied yet and mainly parasitoids of important aphid pests are recorded. Stary (1962) reported ten species for the first time; other species were added by Grigorov (1962, 1964, 1972), Pelov (1972, 1978), and Vassileva-Sumnalieva (1976).

For the identification of the subfamily Aphidiinae, see van Achterberg (1990, 1993), and for a catalogue of the Aphidiinae, see Mackauer (1968). For the identification of the species the keys by Tobias & Kirijak (1986) and the papers by Pennacchio & Tremblay (1987) and Chen et al. (1990) were used.

Checklist Aphidiinae Haliday, 1833 (37 species)

Adialytus Foerster, 1862

ambiguus (Haliday, 1834) (nec auctt.; A. arvicola Stary, 1961; from Sipha (Rungsia) may-dis Passerini). Stary (1962).

salicaphis (Fitch, 1855) (Lysiphlebus laticephalus (Telenga, 1953); from Chaitophorus spec. Stary (1962).

Aphidius Nees, 1818

avenae Haliday, 1934 (= picipes (Nees, 1812); unavailable name); from Sitobion avenae Fabricius, and from Acyrtosiphon pisum Harris). Grigorov (1964).

eadyi (Stary, 1980) (from Acyrthosiphon pisum Harris). New to Bulgaria.

ervi (Haliday, 1834) (from *Macrosiphum rosae* Linnaeus). Grigorov (1962), Vassileva-Sumnalieva (1976).

funebris Mackauer, 1961 (from Dactynotus cichorii Koch, Dacynotus sonchi Linnaeus, and Uromelan jaceae Linnaeus). Stary (1962).

hortensis Marshall, 1896 (from *Drepanosiphum platanoidis* Schrank). Vassileva-Sumnalieva (1976).

matricariae Haliday, 1834 (from Myzus persicae Sulzer). Pelov (1978).

microlophi Pennachio & Tremblay, 1987 (from *Microlophium carnosum* Buckton). New to Bulgaria.

rhopalosiphi de Stefani-Perez, 1902 (from Sitobion avenae Fabricius). New to Bulgaria.
rosae Haliday, 1834 (from Macrosiphum rosae Linnaeus). Vassileva-Sumnalieva (1976).
salicis Haliday, 1834 (from Chaitophorus salicti Schrank). Vassileva-Sumnalieva (1976).
smithi Sharma & Subba Rao, 1959 (from Acyrthosiphon pisum Harris). New to Bulgaria.
staryi Chen & Luhman (in Chen et al.), 1990 (from Acyrthosiphon pisum Harris). New to Bulgaria.

urticae Haliday, 1834 (from Microlophium carnosum Buckton). New to Bulgaria. uzbekistanicus Luzhetski, 1960 (from Sitobion avenae Fabricius). New to Bulgaria.

Binodoxys Mackauer, 1960

angelicae (Haliday, 1833) (from Aphis pomi DeGeer). Pelov (1972).

Diaeretella Stary, 1960

rapae (M'Intosh, 1855). Pelov (1978).

Dyscritulus Hincks, 1943

planiceps (Marshall, 1896) (from *Drepanosiphum platanoidis* Schrank). Vassileva-Sumnalieva (1976).

Ephedrus Haliday, 1833

cerasicola Stary, 1962 (from Myzus cerasi Fabricius). Vassileva-Sumnalieva (1976). laevicollis (Thomson, 1895) (= E. minor Stelfox, 1941; ?E. obscurator (Bouché, 1834)) (from Pentatrichopus spec. and Macrosiphum rosae Linnaeus). Vassileva-Sumnalieva (1976).

niger Gautier, Bonnamour & Gaumont, 1929 (= E. campestris Stary, 1962) (from Dactynotus sonchi Linnaeus and D. cichorii Koch). Stary (1962).

persicae Froggatt, 1904 (from *Myzus cerasi* Linnaeus). Vassileva-Sumnalieva (1976). *plagiator* (Nees, 1812). Stary (1962).

Euaphidius Mackauer, 1961

setiger Mackauer, 1961 (from Periphyllus spec.). Vassileva-Sumnalieva (1976).

Falciconus Mackauer, 1959

pseudoplatani (Marshall, 1896) (from *Drepanosiphum platanoidis* Schrank). Vassileva-Sumnalieva (1976).

Lipolexis Foerster, 1862

gracilis Foerster, 1862 (from Myzus cerasi Fabricius). Vassileva-Sumnalieva (1976).

Lysiphlebus Foerster, 1862

dissolutus (Nees, 1812) (= macrocornis Mackauer, 1960). Stary (1962). fabarum (Marshall, 1896). Stary (1962).

Pauesia Ouilis Pérez, 1931

picta (Haliday, 1834) (from Cinara pini (Linnaeus)?). Stary (1962). unilachni (Gahan, 1927) (from Schizolachnus spec., and S. pineti Fabricius). Stary (1962).

Praon Haliday, 1833

abjectum (Haliday, 1833) (from Sitobion avenae Fabricius?). New to Bulgaria.

dorsale (Haliday, 1833) (from Dactynotus sonchi Linnaeus, and D. cichorii Koch). Stary (1962).

flavinode (Haliday, 1833) (from *Eucalipterus tiliae* Linnaeus, and *Tuberculoides annulatus* Hartig). Vassileva-Sumnalieva (1976).

volucre (Haliday, 1833) (from *Hyalopterus pruni* Geoffroy). Pelov (1972), Vassileva-Sumnalieva (1976).

Trioxys Haliday, 1833

curvicaudus Mackauer, 1967 (from *Eucallipterus tiliae* Linnaeus). Vassileva-Sumnalieva (1976).

pallidus Haliday, 1833 (from Tuberculoides annulatus Hartig). Vassileva-Sumnalieva (1976).

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